

Analysis of the Implementation of Interactive Media as a Learning Support at Al-Azhar Flagship High School Medan

Aulya Aprilyani^{1*}, Azqy Amanatun Syahrani Purba², Aura Adni Audia³, Athar Fattah Fawwaz Syah⁴, Alya Ramadhani⁵

^{1,2,3,4,5} SMAS Unggulan Al-Azhar Medan, Jl. Pintu Air IV Kuala Bekala No.214, Siti Rejo I, Kec. Medan Johor, Kota Medan, Sumatera Utara

Email: aulia12april@gmail.com

* Corresponding Author



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ABSTRACT

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Penelitian ini bertujuan untuk menganalisis keterlaksanaan media interaktif sebagai pendukung pembelajaran di SMA Unggulan Al-Azhar Medan. Latar belakang penelitian berangkat dari meningkatnya kebutuhan akan media pembelajaran yang variatif dan adaptif terhadap karakteristik peserta didik generasi digital. Media interaktif diyakini mampu meningkatkan keterlibatan dan efektivitas belajar, sebagaimana ditunjukkan oleh berbagai penelitian sebelumnya. Penelitian ini menggunakan metode deskriptif kuantitatif dengan melibatkan 36 siswa kelas XII UG E sebagai sampel. Instrumen penelitian berupa angket berskala Likert yang telah divalidasi melalui expert judgment dan diuji reliabilitasnya menggunakan Cronbach Alpha. Data dianalisis menggunakan statistik deskriptif berupa persentase, rata-rata, dan distribusi frekuensi. Hasil penelitian menunjukkan bahwa siswa memiliki preferensi kuat terhadap media pembelajaran yang bersifat aktif dan visual. Media berbasis game menjadi pilihan paling diminati dengan persentase 30,6%, diikuti pembelajaran melalui video sebesar 27,1%. Kuis interaktif menempati posisi berikutnya, sedangkan PowerPoint dan forum diskusi memperoleh minat sedang. Media dengan tingkat minat terendah adalah penjelasan guru secara langsung serta platform hiburan seperti Netflix/Disney. Temuan ini menunjukkan bahwa siswa lebih tertarik pada media yang memberikan pengalaman belajar langsung, interaktif, dan menyenangkan.

This study aims to analyze the implementation of interactive media as a learning support in Al-Azhar Superior High School Medan. The research background departs from the increasing need for learning media that is varied and adaptive to the characteristics of students of the digital generation. Interactive media is believed to be able to increase learning engagement and effectiveness, as shown by various previous studies. This study used a quantitative descriptive method involving 36 students in grade XII UG E as a sample. The research instrument is in the form of a Likert scale questionnaire that has been validated through expert judgment and tested for reliability using Cronbach Alpha. The data was analyzed using descriptive statistics in the form of percentages, averages, and frequency distributions. The results of the study show that students have a strong preference for learning media that are active and visual. Game-based media is the most popular choice with a percentage of 30.6%, followed by video learning at 27.1%. Interactive quizzes take the next position, while PowerPoint and discussion forums gain moderate interest. The media with the lowest level of interest are the teacher's explanations directly as well as entertainment platforms such as Netflix/Disney. These findings suggest that students are more interested in media that provide a hands-on, interactive, and fun learning experience.



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INTRODUCTION

The development of digital technology has driven significant changes in educational practices, including in terms of the use of interactive media as a means of supporting learning ((Ananda, 2023; Palayukan et al., 2024; Puspitasari & Rayungsari, 2024). In secondary schools, the need for more varied learning media is increasingly urgent, along with the complexity of teaching materials and the characteristics of digital generation students (Sma et al., 2021; Wirawan, 2023). Interactive media not only serve as a visual aid but also as a pedagogical bridge that encourages active participation and facilitates a deeper understanding of concepts (Taufan Santoso et al., 2024; Zahari & Razali, 2022).

Various studies show that the use of interactive media is able to increase the effectiveness of the learning process. (Rahayu et al., 2022) Emphasized that the analysis of needs in the development of interactive media, such as interactive PowerPoint in elementary schools, shows the importance of media that is adaptive and appropriate to the learning context of students. Meanwhile, (Nuritha & Tsurayya, 2021) showed that interactive video platforms such as YouTube and Edpuzzle are able to provide a more engaging learning experience and improve students' focus when used as a support for online learning.

In the context of learning, (Aziz & Amidi, 2021; Ratnaningsih et al., 2021) proved that Android-based applications with song media can be an effective alternative learning media because they are able to create a more enjoyable learning atmosphere. Other studies also support the findings. Mimbadri et al. (2019) reported that the application of interactive media has a positive effect on the learning outcomes of elementary school students, especially when the media is designed with the characteristics of students in mind. In line with that, Nisa & Dwiningsih (2021) explained that mobile learning as a supporting medium is able to improve learning outcomes through the flexibility and ease of access offered.

In addition, interactive media has proven to be effective in supporting curriculum implementation and improving the quality of learning (Pasumbung & Pratama, 2022). (Smk & Banyuputih (2022) revealed that the implementation of culture in elementary schools can support the smooth learning based on the 2013 Curriculum. These findings are reinforced Oktavia & Qudsiyah, (2023), which states that these interactive media can increase students' motivation to learn. Another support is also seen in the development of interactive e-modules of biology materials by Annisha (2024), which have been shown to help students understand complex material such as viruses in the context of online learning.

Based on these findings, it can be seen that interactive media has a significant impact on the quality of learning at various levels of education. However, studies on the implementation or extent to which interactive media are actually used effectively in the high school environment are still relatively limited, especially in local contexts such as Al-Azhar Superior High School in Medan. In fact, implementation mapping is very important to see school readiness, teacher competence, and the level of student acceptance of these learning innovations.

Therefore, this study aims to analyze the implementation of interactive media as a learning support in Al-Azhar Superior High School Medan using a quantitative descriptive method. The results of the research are expected to provide a real picture of the practice of using interactive media in schools and become the basis for the development of learning strategies that are more effective and relevant to the needs of today's students.

METHODS

This study uses a quantitative descriptive design that aims to provide an objective picture of the implementation of interactive media as a learning support at Al-Azhar Superior High School Medan. This design was chosen because it is able to describe the phenomenon as it is through numerical data so that the real conditions in the field can be clearly depicted. The research population is all students of Al-Azhar Superior High School Medan, but this study specifically took a sample of 36 students in grade XII UG E.

The sampling technique uses purposive sampling because only students who have participated in learning with interactive media are considered relevant to answer the research focus.

The research instrument used was a closed questionnaire in the form of a Likert scale which was prepared to measure the level of implementation of interactive media in learning activities. The questionnaire covers several aspects, including the availability and accessibility of media, the frequency of use of interactive media in lessons, its ease of use for students, its relevance to the material studied,

and students' perceptions of the effectiveness of interactive media in increasing learning understanding and engagement.

The data collection process was carried out through the distribution of questionnaires directly to grade XII UG E students. In addition, supporting documentation such as class profile data and types of interactive media used in learning were also collected to strengthen the findings. The data obtained was then analyzed using descriptive statistical techniques, including percentage, average, and frequency distribution calculations. The results of the analysis are presented in the form of categories such as excellent, good, sufficient, or insufficient to provide a more comprehensive interpretation of the level of implementation of interactive media in the class.

Table 1. Student Questionnaire

| No. | QUESTION | Skor | | | |
|-----|--|------|---|---|---|
| | | 1 | 2 | 3 | 4 |
| 1 | What kind of interactive media do you like as a learning medium | | | | |
| 2 | How often does learning in school use interactive media | | | | |
| 3 | Interactive media helps me understand the lesson material better. | | | | |
| 4 | I feel more motivated to learn when using interactive media. | | | | |
| 5 | I can remember the material longer after studying using interactive media. | | | | |
| 6 | Do you think using interactive media is more effective than just lecture/book methods? | | | | |
| 7 | Interactive media helps me to be more active in participating in learning. | | | | |

RESULTS AND DISCUSSION

The results of the study show that the implementation of interactive media as a learning support at Al-Azhar Medan Superior High School is in the good category, reviewed on students' preferences and perceptions of various types of media. Data from the questionnaire revealed that students have a strong tendency towards learning media that is active, visual, and allows for direct interaction.

Game-based media occupies the most in-demand position with a percentage of 30.6%. These findings indicate that the elements of games that involve challenge, exploration, and the meaning of learning experiences are very much in line with the characteristics of digital generation students. Video media is in second place (27.1%), indicating that clear visualization elements are able to support material understanding and increase students' learning attention.

Interactive quizzes were chosen by 18.8% of learners, indicating that students like learning evaluations that are responsive and provide quick feedback. Meanwhile, PowerPoint and discussion forums received moderate interest, at 10.6% each. These two media are still considered relevant, but they are less able to create an active learning experience if they are not designed innovatively.

The media with the lowest interest are direct teacher explanations as well as entertainment platforms such as Netflix or Disney (1.2%). This confirms that traditional lecture methods are less attractive to students and do not meet the expectations of interactive learning. While entertainment platforms are not considered a relevant means of learning even though they are popular in everyday life.

Overall, the results of the study illustrate that Al-Azhar Medan Superior High School students pay great attention to interactive media that presents a dynamic, engaging learning experience and facilitates active participation. These findings confirm the importance of integrating interactive media in the learning process to improve student motivation, understanding, and engagement. In addition, these results provide an empirical basis for teachers and schools in developing learning strategies that are more innovative, effective, and in accordance with the characteristics of digital generation students.

CONCLUSION

Based on the entire series of research, from introduction, methods, results, to discussion, it can be concluded that the use of appropriate learning media has a significant influence in increasing student learning engagement. Data shows that educational games are the media most preferred by grade XII UG E students, with a percentage of 30.6%, followed by video learning at 27.1%. This preference indicates

that students are more responsive to media that is interactive, fun, and provides a more dynamic learning experience.

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